ECO Science Foundation and LAMAP Foundation of France sign MoU for Promotion of Inquiry Based Science Education in 10 Muslim Countries of ECO Region

ECO Science Foundation (ECOSF) has developed a working relationship with renowned international organizations and signed a number of Memoranda of Understanding (MoUs) and Agreements for promotion of scientific activities in ECO region. Lately, the Foundation has signed MoU with its long term collaborator La main à la pâte (LAMAP) Foundation of France on April 15, 2016 to work in a cooperative partnership to improve teaching and learning science through an inquiry-based approach and to emphasise on scientific inquiry which integrates science concepts and basic knowledge with process skills and scientific attitudes and values. The MoU was signed on the occasion of an International Conference on Science Education at schools held in Santiago, Chile under the auspices of Chilean Academy of Sciences and the Global Network of National Academies of Sciences (Inter Academy Partnership-IAP) Science Education Programme.

The President of ECOSF Professor Manzoor Soomro and President of LAMAP Professor Daniel Roun signed the MoU. A large number of international scientists and educationists community was also present on the occasion. Both the organizations are of the firm
conviction that science education fosters rational capacities, cognitive skills and citizenship among learners and provides some necessary elements for a good understanding of nature and reality. Following are the main goals of this MoU:

- To formalise the previous activities jointly carried out by the Parties, and provide a framework for new developments;
- To provide professional development opportunities to the educational staff in ECO region comprising of 10 countries: Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Turkey and Uzbekistan; especially teacher educators, with a deeper knowledge and understanding of inquiry-based science education, and how to apply it in schools; and
- To grant permission to ECO educational institutions and authorities to have access to the La main à la pâte teaching and learning resource materials.

In realization of the goals of the MoU, both the Parties agreed to conduct joint activities such as conferences, seminars and workshops on inquiry-based science education and related issues in ECO member countries. The Support will be provided for the implementation of national pilot programmes for the professional development of teachers in ECO countries. In addition, science trainers/teachers and policymakers from ECO countries will be facilitated for the participation in the yearly International Seminar for need-based capacity building of ECO countries.

ECOSF Celebrated The World Water Day 2016 jointly with PCRWR and other Stakeholders

The World Water Day is observed annually on 22nd March all over the world on a specific theme with the objective to learn more about theme related issues, be inspired to tell others and take action to make a difference. The theme for the year 2016 was "Water and Jobs".

Speaking on the occasion Mr. Fazal Abbas Maken, Secretary MoST said that water is key element for socio-economic development of a country. "Today, almost half of the world's workers i.e., about 1.5 billion people work in water related sectors and nearly all jobs one way or the other depend on water and to ensure its safe delivery. He further added that the theme in 2016 is focusing on how enough quantity and quality of water can change workers' lives and livelihoods, and even transform societies and economies". He also emphasized on the conservation of water from household to farm level.

President ECOSF Dr. Manzoor Hussain Soomro in his speech said that water as everybody knows is life and in arid zone it becomes more important. He informed the audience that the World Water Development Report 2016 has been published by the UN, which shows that out of over 3 billion workforce in the world, 78% jobs are water related and around 42% jobs are heavily dependent on water. He proposed that in collaboration with International Labour Organization (ILO) a study may be
conducted by the PCRWR or a university which could bring out the near exact figures so that further need for capacity building in water sector could be derived and undertaken by the Government. He also mentioned about the recent collaboration developed by ECOSF between PCRWR, UNESCO/SASTIW/UNESCO Water Chair at the University of Tehran- Iran during the "International Water Summit" 2-3 March in Iran. Later on Dr. Soomro appreciated the ICARDA Country Manager for his efforts in arid areas of Pakistan and requested him for extending collaboration in other ECO countries as well.

Later on, in the technical session, Prof Dr. Manzoor Hussain Soomro President ECOSF spoke on "Role of Inquiry Based Science Education (IBSE) for awareness of children and water conservation". Dr. Rashid Aftab, Director, Riphah International University also gave a presentation on "Water as Blue Economy"; while Mr. Karamat Ali from Pakistan Water Partnership (PWP) delivered a presentation on "Water and Youth".

**President ECOSF Participates as an Invited Expert Panellist in UNESCO 4th World Congress of Biosphere Reserves (4WCBR) held at Lima- Peru**

The 4th World Congress of Biosphere Reserves (4WCBR) with the theme; "A New Vision for the Decade 2016-2025" was held at Lima- Peru from 14-17 March, 2016. UNESCO Biosphere Reserves, National Committees of UNESCO's Man and the Biosphere (MAB) Programme as well as experts involved in the practical implementation of biosphere reserves; including representatives of governments, biosphere reserves, local communities, UN agencies, NGOs, academic institutions and organizations working with the MAB Programme from all over the world participated in the congress.

In all, over 1000 experts, officials and policy makers from around the world participated in the congress. President ECO Science Foundation Dr. Manzoor Hussain Soomro also participated in the congress. He was an invited speaker and a Panellist in a side workshop; "The Silk Road Initiative: Connecting Biosphere Reserves for Sustainable Development" in 4WCBR and also presented the outcome of workshop in the subsequent Plenary session. Speakers of the Closing Plenary at the Lima Convention Centre included; the ADG for Natural Sciences of UNESCO Ms. Flavia Schlegel, Secretary MAB Dr. Qunli Han, President of UNESCO Executive Board and the Minister for Environment of Peru.

Dr. Soomro’s talk was entitled as "Silk Road – Connecting People for Peace and Sustainable Development in ECO Region through the Power of Biosphere Reserves and IBSE". In his talk Dr. Soomro focused on the significance of Silk Road with reference to ECO member states. He elaborated that almost all the 10 Member States in ECO Region are situated along Silk Road. Two International Economic Co-operation Corridors of the Belt and Road Initiative proposed by China will be built in the ECO Region including China-Central, Asia-West Asia and China - Pakistan Economic Corridor (CPEC). Dr. Soomro said that Silk Routes have traditionally connected geographical areas and people in Asia, Africa and Europe since ancient times and can be followed for connecting people again. He emphasized that the communities and regions along the Silk Routes are vulnerable to climate change and are also under pressure from population growth, resource depletion, and poverty. Thus, promotion of Biosphere Reserves concept can lessen pressure on resources, improve management of environmental risks & increase the welfare of the poorest, as well as advance the Sustainable Development along the Silk Road. He further mentioned that ECOSF being an Inter-Governmental Organization in the region is aimed to promote and fund collaborative scientific research and Inquiry Based Science Education (IBSE) at grass root level and promote gender balance- thereby promoting UN Agenda 2030. He proposed that ECO being Stakeholder of IPBES in the Region has a great potential and could play an active role and would welcome to join hands with MAB-UNESCO Programme for pursuing Agenda-2030 through educating and engaging school children & teachers, college and university students and youth in general on SDGs and conservation of Natural Resources for Sustainable Development along the Silk Road in ECO Region in particular.

He also informed the audience that ECO Science Foundation, CAST China, ISTIC Malaysia and IAP SEP have already planned an IBSE workshop in July 2016 at Karamay in Xinjiang, West China linked with "One Belt-One Road".
Mr. Fazal Abbas Maken, Federal Secretary, MoST visits the new office set up of ECO Science Foundation

Mr. Fazal Abbas Maken, Federal Secretary, Ministry of Science & Technology visited the new office set up of ECO Science Foundation on 26th April 2016. Prof. Dr. Manzoor H. Soomro, President ECOSF welcomed and apprised him of the activities of the Foundation. The Federal Secretary appreciated the initiatives taken by ECOSF and encouraged the President ECOSF and his team to further pursue their objectives actively.

President ECOSF highly appreciated the continuous support of the MoST for establishment and smooth working of the Foundation on this occasion. He also said that ECOSF is providing collaboration access to S&T organizations of Pakistan for other ECO member countries.

It is pertinent to mention here that the ECO Science Foundation (ECOSF) was established in Islamabad-Pakistan in December 2011 as an Intergovernmental Specialized Agency of the Economic Cooperation Organization (ECO), mandated to promote scientific, technological and innovative research collaboration and other relevant activities among the member states leading to economic development in the region.

The Foundation is an accredited Observer/Stakeholder of the Intergovernmental Science and Policy Platform for Biodiversity and Ecosystem Services (IPBES) based in Bonn, Germany and a founder member of Asian STI Think Tanks Network (ASTN). It has established collaboration with international organizations including UNESCO, European Union, International Science Technology and Innovation Centre (ISTIC) Malaysia, La main a la pate Foundation of France and the EvK2CNR Foundation, Italy for promotion of science technology and innovation in the region.

It is worth mentioning here that The Ministry of Science and Technology, Government of Pakistan, is hosting and patronizing the Foundation. Recently, the Ministry allocated office space to the Foundation in its newly constructed building.

ECOSF NEWSLETTER

COMSTECH-FCC-ECOSF Jointly Organize an International Workshop on “Genomics and Genome Editing”

The Organization of Islamic Cooperation (OIC) Standing Committee on Scientific and Technological Co-operation (COMSTECH) Islamabad, Forman Christian College (A Chartered University), Lahore and ECO Science Foundation (ECOSF) jointly organized and International workshop on “Genomics and Genome Editing” scheduled from May 24 to 27, 2016 at Forman Christian College (A Chartered University), Lahore. The workshop focuses on the technologies of Genomics, Metagenomics, Epigenomics, Genome Editing and their use and applications in biomedical and agricultural sciences. Participants and experts from 7 ECO member countries have been selected to join the workshop.
ISTIC One-Day Event on "Embracing the Future: Improving Quality of Science Instruction in Schools" was held at UNESCO Head Quarters in Paris, France on 5 April 2016. The Forum was organized in collaboration with La main a la pat (LAMAP) and the purpose was to highlight the strengths and importance of Inquiry Based Science Education (IBSE) and its implementation at UNESCO level for a wider global audience. The forum was opened by H.E Ms. Irina Bokova, the Director General of UNESCO and Hon. Dato’ Seri Mahdzir Khalid, Minister of Education Malaysia accompanied by the Secretary General of Ministry of Science, Technology and Innovation (MoSTI) of Malaysia. Dato’ Dr. (Ir.) Lee Yee Cheong Chairman of ISTIC Governing Board welcomed the audience. Welcome remarks were also made by Prof. Daniel Rouan President of LAMAP Foundation and Dato’ Sri Dr. Noorul Ainur Mohd. Nur, Secretary General of MoSTI, Malaysia. H.E Irina Bokova in her opening address thanked Govt. of Malaysia for their continuous support in promoting science education. She congratulated ISTIC for leading such an exemplary work to advance Science, Technology and Innovation and promote South-South Cooperation always with a special focus on empowering women. She said that the world today needs more science, better science, more inclusive science. She also said that science, technology and innovation is vital to eradicate poverty, protect human rights, empower women and for the sustainability of the planet; and this must start on the benches of schools.

The Malaysian Minister of Education H.E. Mr. Khalid thanked the DG UNESCO for gracing the occasion and highlighted the efforts of Malaysian government for promotion of education and science, not only in Malaysia but also in neighbouring countries.

Earlier, Chairman ISTIC Governing Board, Dato Lee Cheong in his address welcomed all the participants. He said that ISTIC is dedicated to Inquiry Based Science Education. The 9th ISTIC Governing Board Meeting was held on 6 April 2016 at the UNESCO Head Quarters in Paris. Prof. Dr. Manzoor Hussain Soomro, President ECO Science Foundation as member of ISTIC GB participated in the meeting and contributed in decision making.

The ISTIC GB meeting was chaired by its Chairman Academician Dato (Ir.) Lee Yee Cheong and attended by the members from all continents.

New Ambassador of Uzbekistan Assures His Country’s Cooperation in Pursuing the Objectives of ECOSF

The new Ambassador of Uzbekistan to Pakistan H.E. Mr. Furkat Siditov assured maximum possible support of his country for pursuance and achievement of the objectives of ECO Science Foundation (ECOSF) for betterment of people of ECO region including Uzbekistan. These remarks were made by the Ambassador during a meeting with President ECOSF Prof. Dr. Manzoor H. Soomro, who called upon the Ambassador at the Uzbekistan Embassy in Islamabad on 20 April 2016.

Earlier, the Ambassador warmly welcomed the President ECOSF at the Embassy and apprised him about his new responsibility as the Ambassador of Uzbekistan to a friendly country- Pakistan. H.E. Mr. Furkat Siditov highlighted the historical background of his country and shared that after independence in 1991, Uzbekistan has shown reasonably good economic growth especially in the field of Agriculture and produces World’s best cotton. He further shared that agricultural machinery is also being produced and exported.
to other countries of the world and at certain level, the 
agricultural machinery is also being exported to ECO countries
which can also be enhanced to take maximum benefit.

President ECOSF elaborated on the establishment and history
of the Foundation, its programme including coordinate and
fund S&T research and activities in the ECO member states
and Inquiry Based Science Education (IBSE) to strengthen
the science base of future generations in collaboration with La
main a la pate Foundation of France. Prof. Soomro further
apprised the Ambassador about the Foundation's collaboration
with international organizations including; IPBES, UNESCO,
International Science Technology and Innovation Centre
(ISTIC) Malaysia, and the EvK2CNR Foundation, Italy for
promotion of science technology and innovation in the region.
At the end, President ECOSF thanked the Ambassador for his
hospitality and requested him for the follow up on the process
of ratification of ECOSF Charter by the Uzbekistan
Government. He offered the cooperation/facilitation of ECOSF
for creating scientific linkages among the scientific
organizations and communities of ECO countries with
Uzbekistan for enhancing economic development in the region.

**ECOSF Scientists Join and Address the Regional Workshop on Biosafety and Biosecurity in Life Sciences Research, Islamabad, Pakistan (April 26 – 28, 2016)**

The Regional Workshop on Biosafety and Biosecurity in Life
Sciences Research was being organized by the
Commission on Science and Technology for Sustainable
Development in the South (COMSATS) in collaboration with
the Islamic Scientific Educational and Cultural
Organization (ISESCO), and the Pakistan Academy of
Sciences (PAS), from 26th to 28th April 2016.

Dr. Saima Tanveer
Science Officer
ECOSF delivered
a talk on "Inquiry
Based Science
Education (IBSE)
in Biosafety
Education in the
Technical Session
of the workshop,
whereas President
ECOSF also
joined the session
and shared his
wisdom. In the presentation, she shared the ECOSF
Objectives and activities with the audience and highlighted
the need to addressed the Regional Science Diplomacy on
Biosafety and Biosecurity and the collective efforts should
be ensured to manage the risks as well as regional
collaboration should also be strengthened to ensure non-
hazardous use of scientific advances. Since IBSE is a
process in which not only facts are explained but where
questions, problems and scenarios are presented to the
people to solve issue, it can be applied for defining ethics.

There is need to develop a regional network to promote
awareness and understanding on ethics or laws that might
help to ensure and promote ethical
behaviour in the
region.

This workshop was
intended to provide
a platform for
discussing
advancements in
biosafety and
biosecurity; ethical
implications in life
sciences research;
bioccontainment; as
well as bio-waste disposal. The workshop consisted of keynote lectures, invited talks, a poster session, group case
studies and a poster exhibition. The technical deliberations
of the three-day workshop were spread over seven
sessions covering issues, research and findings related
to: Biosafety and lab safe handling; Biosecurity; and
Bioethics. The event has participation from over 40
government institutions, R&D organizations, and
universities from 20 cities of Pakistan, as well as speakers
from Kazakhstan, Jordan, Bahrain, Iran, USA, and Nigeria.
The event is also featuring poster presentations based on
research related to the theme of the workshop.
Speakers of the Regional Biosafety & Biosecurity Workshop from ECO Countries called upon the Federal Secretary MoST on 28 April 2016

Dr. Graeme Firth, Programme Manager at International Science and Technology Center (ISTC), Astana and Prof. Dr. Behzad Ghareyazie, Executive Director, Iran Biotechnology Information Centre (IRBIC), Iran called upon Secretary Ministry of Science & Technology (MoST) Mr. Fazal Abbas Maken on 28 April 2016 for promotion of collaboration with Pakistan under the auspices of ECOSF. The meeting was initiated and coordinated by President ECOSF Dr. Manzoor Hussain Soomro. Dr. Soomro shared with them the ECOSF initiative of Inquiry Base Science Education (IBSE) in ECO Region in collaboration with international partners, viz., La main à la pâte Foundation of the Academy of Sciences of France, the International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) Kuala Lumpur- Malaysia and the IAP’s Science Education Programme (IAP SEP). Dr. Graeme Firth and Dr. Behzad Ghareyazie appreciated the efforts and scientific initiatives including IBSE taken by ECO Science Foundation for the betterment of masses of ECO region.

Preparatory Meeting for Scoping Workshop on Standardizing Engineering Qualification in ECO Countries held at ECOSF Office

A preparatory meeting of UNESCO, ECOSF and Pakistan Engineering Council (PEC) was held on April 1, 2016 at ECOSF office, Islamabad. Objective of the meeting was to develop a concept note for Scoping Workshop on Standardizing Engineering Qualification in ECO Countries at Tajikistan (Dushanbe) to be held from August 30-September 4, 2016.

During the meeting different modalities and responsibilities were worked out and a draft concept note was developed. In addition a four days Pre-Scoping visit to Dushanbe and meeting of the President ECOSF Dr. Manzoor Soomro, Engineer Dr. Nasir A. Khan, Additional Registrar, Pakistan Engineering Council and a representative from UNESCO with Tajikistan Academy of Sciences and Engineering Schools/ Institutions and universities in Dushanbe were proposed during 24-28 April 2016. A tentative programme for the pre scoping meeting has also been finalized.

Selection of Five ECO Participants to LAMAP’s 7th International Seminar on Science and Technology Education in School to be held from 6-12 June 2016 at Sevres-Paris

The La main à la pâte Foundation organises, in collaboration with the French Ministry of Foreign Affairs and the Directorate of European and International Affairs and Cooperation (French Ministry of Education, Higher Education and Research), its seventh International seminar on science and technology education in school. This seminar will take place from 6 to 11 June 2016 at the International Centre for Educational Studies (CIEP) in Sèvres, near Paris. It will address inquiry-based science education issues, strategies for innovation in educational practices and strategies for generalisation into educational systems.

On the recommendations of ECOSF five participants (three from Pakistan/ECOSF and two from Turkey) have also been selected to participate in the seminar.

The seminar will focus especially on the continuous professional development of science teachers.
Direct Lahore-Dushanbe flights to begin next month

Pakistan and Tajikistan are going to start direct flights next month ahead of Prime Minister Nawaz Sharif’s visit to Dushanbe for inaugurating the Central Asia-South Asia (Casa) 1,000 power import project. The flights, beginning from May 6, are aimed at improving and strengthening bilateral trade and economic relations between the two countries.

Tajikistan would be the first among Central Asian states to commence direct flights to Pakistan. About 100 passengers go to Tajikistan via indirect flights and land routes through Afghanistan every month. The first flight is scheduled to depart from Lahore to Dushanbe. There will be two flights per week on this route.

According to a Tajik embassy official, Lahore to Dushanbe would be the first phase and in the second phase, direct flights would be operated from Karachi to Dushanbe. Tajik Ambassador Jononov Sherali said, “Direct flights would increase economic ties and people-to-people contact between the two countries.” Comparing the cost of direct and indirect flights, Jononov said, “An indirect flight costs Rs120,000 while the direct flight will cost only Rs35,000. Since it is a lot cheaper, it is likely that the number of passengers will also increase.”

Distinguished Visitors to ECOSF

- Professor Kausar A. Malik (H.I., S.I., T.I.) Distinguished National Professor of Biotechnology and Dean of Research from FCC College Lahore. He visited ECOSF on 25 April 2016 to finalize the programme of joint COMSTECH-FCC-ECOSF workshop on “Genomics and Genome Editing” in May 2016.

- Prof. Nisar Ahmad Siddiqi on 26 April 2016 to discuss IBSE plan of action in Sukkur IBA Community Colleges.

- Professor M. Iqbal Bhangar from ICCBS Karachi visited ECOSF office on 28 April 2016.

- Dr. Graeme Firth, Programme Manager at International Science and Technology Center (ISTC), Astana and Prof. Dr. Behzad Ghareyazie, Executive Director, Iran Biotechnology Information Center (IRBIC), Iran paid a visit to the new office setup of ECO Science Foundation on 28 April 2016.

- Mr. Athar Usama, CEO Pakistan Innovation Foundation called upon the President ECOSF on 22 April 2016 at his office to discuss the mutual interests.
Upcoming International Events posted on ECOSF website and FB page

2nd International and 14th National Iranian Crop Science Congress
Crop Science Society of Iran is organizing the “2nd International and 14th National Iranian Crop Science Congress” from August 30 to September 1, 2016 at the University of Guilan, Rasht, Iran. This is the most important gathering of crop plants specialists in Iran which is expected more than 2000 scientists, policy makers, academia, university professors and students attend in this meeting. The theme for this meeting is “Knowledge-Based Crop Production and Water Productivity”. Researchers, students, and academia are cordially invited to attend this congress in the heart of aromatic paddy fields of Iran.

Last Date: 31 July 2016

Launch of Cleantech programme for SMEs and Startups in Pakistan by UNIDO
UNIDO (United Nations Industrial Development Organization) is managing a global programme called Global Cleantech Innovation Programme, Cleantech is a global competition aimed at promotion of Innovations in the area of Clean Technologies. This competition is simultaneously been carried out in seven countries around the world, the main aim of this competition is to foster innovations in Renewable energy, Energy Efficiency, Water Efficiency and Waste to Energy. The target market of Cleantech competition is SMEs and Startup companies. This programme involves extensive mentoring, training, access to investors and opportunities to showcase their innovations. Winners will be given prizes ranging from US$ 15,000 to 20,000 plus winners will be given further mentorship and training in Silicon Valley, USA. Cleantech is basically a business accelerator programme which is aimed at converting the Cleantech ideas into viable businesses.

Last Date: 15 May 2016

Research Training Fellowship for Developing Country Scientists (RTF-DCS): Call for Applications for 2016-17
The NAM S&T Centre invites applications from the scientists, technologists and engineers of the developing countries for the award of Fellowships under the ‘Research Training Fellowship for Developing Country Scientists (RTF-DCS)’ scheme for the year 2016-17. The RTF-DCS Programme aims at capacity building of the developing countries in the fields of Science & Technology through the affiliation of their scientists with Indian scientific and academic Centres of Excellence.

Last Date: 17 June 2016
Web Link: [http://eco4science.org/Research-Training-Fellowship-for-Developing-Country-Scientists-RTF-DCS-Call-for-Applications-for-2016-17](http://eco4science.org/Research-Training-Fellowship-for-Developing-Country-Scientists-RTF-DCS-Call-for-Applications-for-2016-17)

TWAS-Lenovo Science Prize in Chemical Sciences Call for Nominations
The Prize, sponsored by Lenovo, has been established to give international recognition and visibility to outstanding scientific achievements made by scientists living and working in the developing countries. The prize carries a USD 100,000 monetary award and a medal.

Last Date: 16 May 2016

[TWAS-MBRS] Fayzah M. Al-Kharafi Prize Call for Nominations
The Council of TWAS has approved the institution of the "Fayzah M. Al-Kharafi Prize", generously sponsored by our friend and colleague Fayzah. This annual prize, worth USD 4,000, will recognize women scientists from Scientifically and Technologically lagging countries and will rotate among various fields of science. The first recipient of the "Fayzah M. Al-Kharafi Prize" will be invited to receive her prize at the opening ceremony of the TWAS's 27th General Meeting to be held later this year.

Nominations for the 2016 prize are invited in the following fields: Chemistry, Mathematics, Physics and Engineering Sciences.

Last Date: 1 June 2016
Web Link: [http://eco4science.org/-TWAS-MBRS-Fayzah-M-Al-Kharafi-Prize-call-for-nominations](http://eco4science.org/-TWAS-MBRS-Fayzah-M-Al-Kharafi-Prize-call-for-nominations)